

**16 March 1999**



**Acquisition**

**AIRCRAFT STRUCTURAL INTEGRITY  
PROGRAM (ASIP)**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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Supersedes 442 FWI 21-101, 11 February 1998

Pages: 7  
Distribution: F

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This instruction implements T.O. 1A-10A-38, *Aircraft Structural Integrity Program Service Life Monitoring Program*, AFRPD 63-10, *Aircraft Structural Integrity*, AFI 63-1001, *Aircraft Structural Integrity Program*, and Air Force Aircraft Structural Integrity Program (ASIP), delineates policy, and assigns responsibilities for the management of the Individual Aircraft Tracking Program. It applies to pilots and maintenance personnel of the 442d Fighter Wing, Whiteman Air Force Base, Missouri, only.

**SUMMARY OF REVISIONS**

This revision changes the implementation manuals, and assigns the proper Instruction series number. A (I) indicates revisions from the previous edition.

**1. Objectives.** The objective of the Individual Aircraft Tracking Program is to determine the actual service usage of each aircraft and the potential impact of this usage on estimated service life, inspection intervals, and maintenance and modification schedules. The actual service usage is determined from the mission and counting accelerometer data collected and reported as described by this instruction and T.O. 1A-10A-38. All aircraft assigned to the 442 FW participate in the program. Additionally, aircraft 79-113, and 79-123 are equipped with life history recorder units (flight data recorders).

**2. Recorder Inputs (Attachment 2):**

- 2.1. The crew chief is responsible for flight data recorder inputs for local sorties on a flight-by-flight basis and will insure inputs are set prior to cross-country departure.
- 2.2. Quality Assurance will provide the aircraft basic weight to be entered on Attachment 2 for the applicable aircraft.

2.3. Attachment 2 will be maintained in the 781 binder for the two aircraft equipped with flight data recorders (79-113 and 79-123).

**3. Point of Contact (POC).** The Specialist Flight Chief is the POC at Whiteman Air Force Base, Missouri. He or she will:

3.1. Coordinate all maintenance repair actions with the Flight Loads Data Program Manager at SM-ALC, McClellan Air Force Base, California.

3.2. Ensure an adequate number of replacement cartridges are available for unit deployment.

**4. Transmittal of Data.** The 303 FS/MAA and/or MAB personnel (crew chief) will monitor the percent remaining window on the recorder. When the magnetic tape in the cartridge reads 25 percent or below, the crew chief will notify the Specialist Flight immediately. When the aircraft is scheduled for a cross-country mission, the crew chief will ensure a sufficient amount of tape for the mission is remaining (20 percent equals 3 hours). If insufficient tape exists, contact the Specialist Flight immediately.

**5. AFTO Form 278, Aircraft Flight Log:**

5.1. Locally the AFTO Form 278, Aircraft Flight Log, will be initiated by the debriefer on a flight-by-flight basis with the tail number, date, base code, takeoff weight, and takeoff fuel. The pilot will furnish information on the number of rounds fired, rounds remaining before takeoff, number of in-flight refuelings, and number of landings. The crew chief will forward accelerometer readings to the debriefer as soon as possible and the debriefer will annotate flight time, airframe hours, and accelerometer readings.

5.2. Cross-country:

5.2.1. Upon return, the debriefer will ensure the total flight time is entered since leaving home station.

5.2.2. The pilot will ensure the total number of landings and in-flight refuelings are annotated since leaving home station.

5.2.3. The debriefer is responsible for collecting, entering, and forwarding data in the Foxpro Flight Data Entry Program via modem or mail to OC-ALC/TILOF, 7851 2nd St, Rm 105, Tinker AFB OK 73145-9145. The data will be stored locally for 6 months on disk.

**6. Component Tracking Sheet.** When a structural component is changed, a locally generated Component Tracking Sheet, Attachment 3, will be annotated and forwarded to: OC-ALC/TILOF.

**7. AFTO Form 11, A-10 Recording System Status.** The Specialist Flight Chief is responsible for the maintenance and monthly disposition of AFTO Form 11, A-10 **Recording Systems Status**.

MICHAEL K. LYNCH, Colonel, USAFR  
Commander

**Attachment 1**

**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION**

***References***

AFPD 63-10--*Aircraft Structural Integrity*

AFI 63-1001--*Aircraft Structural Integrity Program*

T.O. 1A-10A-38--*Aircraft Structural Integrity Program Service Life Monitoring Program*

## Attachment 2

## RECORDER INPUTS

Table A2.1. Recorder Inputs

<u>DISPLAY, PICTORIAL VIEW, (PANEL F10)</u>									
<u>ACFT SER NO</u>				GROSS WT	FUEL WT				
A B C D				E F G H	I J K L				
<u>BASE</u>	<u>MISSION</u>	<u>CONFIG</u>	<u>YR</u>	<u>MONTH</u>	<u>DAY</u>				
M N	O P	Q R S	T	U V	W X				

AIRCRAFT SERIAL NUMBER. The aircraft is identified by coding numbers into A, B, C, and D. The second digit of the aircraft serial number shall be encoded in A and the last three divided by a 0 shall be entered as follows:

Example: Aircraft 79-0123 would be encoded as follows : 9 1 2 3

AIRCRAFT GROSS WEIGHT: The first four digits of the weight of the aircraft shall be entered as follows:

<u>GROSS WEIGHT</u>	<u>CODING INPUT</u>
(lbs)	E F G H
25,000	2 5 0 0
34,950	3 4 9 5

FUEL WEIGHT. The first four digits of the weight of the fuel, unless the total is less than 10,000, then the first three digits of the fuel weight preceded by a 0 shall be entered as follows:

<u>WEIGHT</u>	<u>CODING INPUT</u>
(lbs)	I J K L
1,000	0 1 0 0

9,340	0 9 3 4
10,220	1 0 2 2
21,650	2 1 6 5

BASE. Coding for BASE (inputs M and N) will be 2 and 6 respectively.

MISSION  
CODES:

<u>TYPE</u>	<u>LOCAL CODE</u>	<u>CODING</u> <u>INPUT</u>	<u>AFTO</u> <u>INPUT</u>	<u>278</u>
		O	P	
Close Air Sup- CAS port		0	1	CAS
Escort	ESC	0	2	ESC
Search & Rescue	SAR	0	3	SAR
Functional	FCF	0	4	FCF
Check Flight				
Conversion	CV	0	5	CV
Basic Fighter	BFM	0	9	BFM
Maneuvers				
Maverick Train- MAV ing		1	3	MAV
Electronic War- EWR fare Range		1	4	EWR
Air to Air Refu- AAR eling		1	5	AR
Navigation	NAV	1	6	NAV
Other	OTH	1	7	COM
Forward	Air FAL	2	0	FAL
Control				

**NOTE:** If a flight is a combination of missions, the primary mission should be coded.

CONFIGURATION. The configuration will be defined and coded according to the total external store weight carried on wing store stations 229, 187, 144, and 66. For the outboard pylon stations 229 and 187, the combined weight shall be input. The weapons complement and individual store weight of the various stores are given in T.O. 1A-10A-38, Table 3-5. Coding shall be input as follows:

<u>PYLON STA- TIONS</u>	<u>PYLON STA- TIONS</u>	<u>PYLON STA- TIONS</u>			
(1, 2, 10, 11)	(3, 9)	(4, 8)			
TOTAL WT*	CODE	TOTAL WT	CODE	TOTAL WT*	CODE
(lbs)	Q	(lbs)	R	(lbs)	S
0	0	0	0	0	0
250	1	250	1	500	1
500	2	500	2	1,000	2
750	3	750	3	1,500	3
1,000	4	1,000	4	2,000	4
1,250	5	1,500	5	2,500	5
1,500	6	2,000	6	3,000	6
1,750	7	2,500	7	3,500	7
2,000	8			4,000	8

Average weight = total weight of both sides divided by two. For intermediate weights –put the lower value.

YEAR, MONTH, DAY. The last digit of the year, the number of the month (preceded by 0 for single digit months), and the day (preceded by 0 for single digit days) shall be entered as follows:

	<u>YEAR</u>	<u>MONTH</u>		<u>DAY</u>	
	T	U	V	W	X
1996	6	0	1	0	1
1998	8	1	0	1	2
1999	9	0	6	2	1
2000	0	1	2	3	1

## Attachment 3

## SAMPLE COMPONENT TRACKING SHEET

1.AIRCRAFT SERIAL NUMBER: (79-0113)

2.BASE: (026 WHITEMAN)

3.DATE: (980128)

FLIGHT HOURS: (4513.4)

4.COMPONENT:

a. DESCRIPTIONSERIAL NUMBER

LEFT SIDE VERTICAL FIN(00B500 1 4 5 7)

RIGHT SIDE VERTICAL FIN(00B500 1 2 6 3)

LEFT SIDE OUTER WING(00B6200 3 4 5)

RIGHT SIDE OUTER WING(00B6200 2 1 9)

LEFT SIDE NACELLE(00A4000 4 5 8)

RIGHT SIDE NACELLE(00A4000 1 0 0)

HORIZONTAL STABILIZER(00B5300 6 4 0)

CENTER WING(00A6100 1 1 0)

b. REMOVED:

SERIAL NUMBER (257-5000) PART NUMBER 1057-1

c. INSTALLED:

SERIAL NUMBER (257-5010) PART NUMBER 1057-1

5.DISPOSITION OF REMOVED COMPONENT:

☐ CONDEMNED☒ REPAIRABLE/NRTS☐ REPAIRED ON SITE/RETURNED TO SUPPLY☐ OTHER (EXPLAIN BELOW)

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**NOTE:** ONE FORM SHALL BE USED FOR EACH COMPONENT REPLACED.